hv

UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,968	10/19/2000	Carlos V. Pinera	6169-137	6538

40987 7590 11/28/2005		EXAMINER
AKERMAN SENTERFITT		KISS, ERIC B
P. O. BOX 3188		
WEST PALM BEACH, FL 33402-3188	ART UNIT	PAPER NUMBER
	2192	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/691,968	PINERA ET AL.
	Examiner	Art Unit	
	Eric B. Kiss	2192	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08 September 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11 and 13-33* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 13-33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All　b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 8 September 2005 has been entered. Claims 1-

11 and 13-33 are pending.

Response to Amendment

2.   Applicant's cancellation of claim 12 appropriately addresses the objection under 35

U.S.C. § 132(a) and the rejection of claim 12 under 35 U.S.C. § 112, first paragraph, based on

new matter. Accordingly, this objection and rejection are withdrawn in view of Applicant's

amendment.

Response to Arguments

3.   Applicant's arguments with respect to claims 1-11 and 13-33 have been considered but

are moot in view of the new ground(s) of rejection.

It is noted, however, that claim 32 does not require the query to be generated by the

configuration client.

Claim Rejections - 35 USC § 103

4.   The text of those sections of Title 35, U.S. Code not included in this action can be found

in a prior Office action.

5.　　Claims 1-6, 10, 11, 13-20, and 24-33 rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent No. 5,920,725 to Ma et al. in view of U.S. Patent No. 6,314,088 to

Yamano.

As per claim 1, *Ma et al.* disclose establishing a first communications connection

between a platform managing active application components and a configuration client disposed

in a client position (client app 74 and object adapter 80; see, for example, Fig. 5; col. 8, lines 10-

34; and col. 9, lines 6-43); establishing a second communications connection between said

configuration client and a configuration server (object adapter 80 and meta server 70; see, for

example, Fig. 5; and col. 11, lines 1-24); delivering client position specific updates to said

configuration client over said second communications connection, wherein each update

corresponds to at least one particular application component (client classes are updated; see, for

example, Figs. 5 and 8; col. 9, lines 6-43; and col. 11, lines 25-40); notifying said platform that

updates are available (see, for example, col. 9, lines 6-43); responsive to said notification,

terminating execution of said particular active application components, delivering each said

update over said first communications connection to said platform, applying each said update to

said at least one corresponding application component, and re-executing each said update

application component (see, for example, col. 9, lines 6-43; and col. 11, lines 25-40).

Ma et al. fails to expressly disclose the platform and configuration client both being

disposed in a client position and the configuration client submitting at least one query to the

configuration server via the second communication connection. However, *Yamano* teaches a

configuration client being disposed in a client position (see, for example, Figs. 1 and 2 and col. 3,

lines 42-63) and the configuration client submitting at least one query to the configuration server

(see, for example, col. 4, lines 4-28). Therefore, it would have been obvious to one of ordinary skill in the computer art at the time the invention was made to modify the method of *Ma et al.* to include such a configuration client arrangement and query submission. One would be motivated to do so facilitate the use of multiple configuration servers.

As per claim 2, *Ma et al.* further disclose the step of terminating comprising: identifying said at least one particular corresponding application component to be updated based on said notification (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66); terminating instances of each said identified application component before said instances self-terminate (objects having a reference count of zero are deleted; a client object referencing an invalid object can read the invalid bit from the cache and decide to release the invalid object and load the update object; see, for example, col. 9, lines 6-43); and removing interdependencies between said terminated application component instances and other application components (for example, new references to objects marked invalid are no longer made; see, for example, col. 10, lines 39-66).

As per claim 3, *Ma et al.* further disclose the re-executing step comprising: instantiating each said updated application component (see, for example, col. 10, lines 39-66); and initializing each said updated application component instance (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66).

As per claim 4, *Ma et al.* further disclose the initializing step comprising: communicating configuration information to said configuration client (see, for example, col. 9, lines 6-43); and reinitializing state information internal to each said updated application component based on said configuration information (see, for example, col. 9, lines 6-43; and col. 10, lines 39-66).

As per claim 5, *Ma et al.* further disclose requesting from said configuration client update notifications, said update notifications notifying said platform of application component updates as said updates become available in said configuration server (see, for example, col. 9, lines 6-43).

As per claim 6, *Ma et al.* further disclose the step of transmitting update notifications over said second communications connection to said configuration client, said update notifications notifying said configuration client of application component updates as said updates become available in said configuration server (see, for example, col. 9, lines 6-43).

As per claim 10, *Ma et al.* disclose a platform for managing active application components (client app 74; see, for example, Fig. 5; col. 8, lines 10-34; and col. 9, lines 6-43); a configuration server for storing updates (meta server 70; see, for example, Fig. 5; and col. 11, lines 1-24); and a configuration client for receiving updates from said configuration server and communicating said received updates to said platform (object adapter 80; see, for example, Fig. 5; col. 8, lines 10-34; and col. 9, lines 6-43); said platform receiving said updates from said configuration client, terminating selected ones of said active application components, applying said received updates to said terminated application components, and reloading said updated application components (see, for example, Figs. 5 and 8; col. 9, lines 6-43; and col. 11, lines 25-40).

Ma et al. fails to expressly disclose the platform and configuration client both being disposed in a client position and the configuration client submitting at least one query to the configuration server via the second communication connection. However, *Yamano* teaches a configuration client being disposed in a client position (see, for example, Figs. 1 and 2 and col. 3,

lines 42-63) and the configuration client submitting at least one query to the configuration server

(see, for example, col. 4, lines 4-28). Therefore, it would have been obvious to one of ordinary

skill in the computer art at the time the invention was made to modify the method of *Ma et al.* to

include such a configuration client arrangement and query submission. One would be motivated

to do so facilitate the use of multiple configuration servers.

As per claim 11, *Ma et al.* discloses that new instances of objects are created from the

object description fetched from the meta-server's database (see, for example, col. 6, lines 4-6).

Thus, at bootstrap (when new object instances need to be created), the configuration server is

queried to determine the application components (object descriptions).

As per claim 12, *Ma et al.* further discloses active application components being

processes executing in the background of the platform (see, for example, col. 4, lines 59-63).

As per claim 13, *Ma et al.* further disclose a notifier object and a listener interface,

wherein said active application components are configured to receive update notifications from

said configuration client through said listener interface (see, for example, col. 9, line 6, through

col. 10, line 66).

As per claim 14, *Ma et al.* further disclose a notifier object and a listener interface,

wherein said configuration client is configured to receive update notifications from said

configuration server through said listener interface (see, for example, col. 9, line 6, through col.

10, line 66).

As per claims 15-20, these are machine readable storage versions of the claimed method

steps discussed above (claims 1-6). *Ma et al.* further disclose the use of a machine readable

storage for implementing the prescribed method steps (see, for example, cols. 21-22). All other

limitations have been addressed as set forth above.

As per claims 24-31, see the disclosure applied above to claims 1-3, 5, 15-17, and 19.

As per claim 32, *Ma et al.* discloses establishing a communications connection between a

client and a configuration server as the client undergoes bootstrap and querying the configuration

server to identify a plurality of application components that are to be installed in the client (*Ma et*

al. discloses that new instances of objects are created from the object description fetched from

the meta-server's database (see, for example, col. 6, lines 4-6). Thus, at bootstrap (when new

object instances need to be created), the configuration server is queried to determine the

application components (object descriptions)); said client installing and executing said identified

application components (see, for example, col. 9, lines 6-43); updating at least one application

component within the configuration server (client classes are updated; see, for example, Figs. 5

and 8; col. 9, lines 6-43; and col. 11, lines 25-40); conveying a notification that the application

component is updated to said client (see, for example, col. 9, lines 6-43); said client determining

whether the application component is executing and when said application component is not

executing, receiving said updated application component from said configuration server and

replacing the application component with said updated application component (objects having a

reference count of zero are deleted; a client object referencing an invalid object can read the

invalid bit from the cache and decide to release the invalid object and load the update object; see,

for example, col. 9, lines 6-43).

As per claim 33, *Ma et al.* further discloses identifying at least one executing process that

utilizes said application component (see, for example, col. 9, lines 6-43); terminating execution

of said identified process before said process self-terminates (objects having a reference count of zero are deleted; a client object referencing an invalid object can read the invalid bit from the cache and decide to release the invalid object and load the update object; see, for example, col. 9, lines 6-43); and executing said identified process utilizing the updated application component instead of said application component (see, for example, col. 9, lines 6-43).

6.   Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,920,725 to Ma et al. in view of U.S. Patent No. 6,314,088 to Yamano and further in view of Andrew S. Tanenbaum, "Computer Networks," 1996, Prentice Hall PTR, third ed. (hereinafter *Tanenbaum*).

As per claims 7 and 21, *Ma et al.* and *Yamano* suggest such a method and machine readable storage (see the disclosure applied above to claims 6 and 20) but fail to expressly disclose the use of UDP packets for delivering the update notifications. However, *Tanenbaum* teaches that it is known to use UDP packets in client-server applications involving one-shot or one request/one response messaging as an alternative to establishing a connection through, for example, a TCP connection (see, for example, pages 37 and 542-543). Therefore, it would have been obvious to one having ordinary skill in the computer art at the time the invention was made to further modify the method and storage of *Ma et al.* to include the use of UDP packets for transmitting update notifications. One would be motivated to do so to gain the advantages of prompt delivery and simplified messaging that UDP provides.

7.   Claims 8, 9, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent No. 5,920,725 to Ma et al. in view of U.S. Patent No. 6,314,088 to Yamano and

further in view of Applicant's Admitted Prior Art.

As per claims 8, 9, 22, and 23, *Ma et al.* and *Yamano* teach such a method, system, and

storage (see the disclosure applied above to claims 1, 10, and 15) but fail to expressly disclose

the use of an LDAP-based database in an LDAP server. However, Applicant admits that it is

known to use an LDAP on a server to access application updates and configuration information

stored in a directory service (see p. 2, line 18, through p. 3, line 5 of the instant specification).

Therefore, it would have been obvious to one having ordinary skill in the computer art at the

time the invention was made to further modify the method, system, and storage of *Ma et al.* to

include the use of an LDAP-based database in an LDAP server as suggested by Applicant's

Admitted Prior Art. One would be motivated to do so to gain the advantages of such a known

LDAP implementation.

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the

Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The

Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be

reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's

supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the

organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature should be directed to the TC 2100 Group receptionist:

571-272-2100.

EBK/EBK
November 22, 2005

TUAN DAM
SUPERVISORY PATENT EXAMINER